

# Economic Style Electric Actuator ITQ Series



INNOBIZ  
기술혁신형중소기업



# ECONOMIC TYPE ITQ ELECTRIC ACTUATOR

## ITQ 0020

- Suitable for small 1" ball valve automation.
- Very high efficiency & cyclic life.
- Free voltage (87~270 VAC, 1Phase) and optional 24V AC/DC
- Very compact and light weight.



PG11 Cable Gland with Wires



ISO F03 Flange

11X11mm  
Square Female Shaft  
with insert 9X9mm

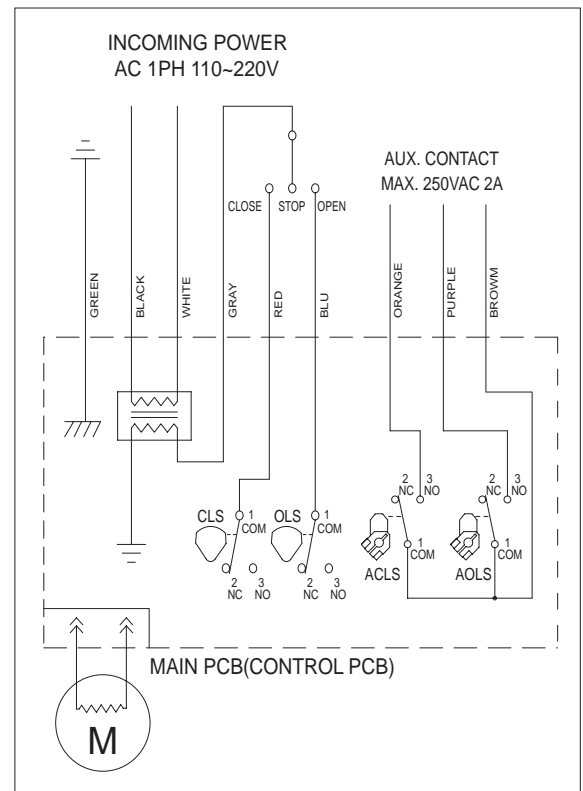
## PERFORMANCE

Model	Rate torque (Nm)	Duty cycle (%)	Operating time	Stem Adaption (Square Female shaft)	Rated current				Motor insulation class	Weight (kgs)
					24V		1Phase			
			50Hz /60Hz		AC	DC	110	220		
ITQ 0020	25	50	11	11 X 11 mm	0.60	0.55	0.16	0.08	E	1

## STANDARD SPECIFICATION

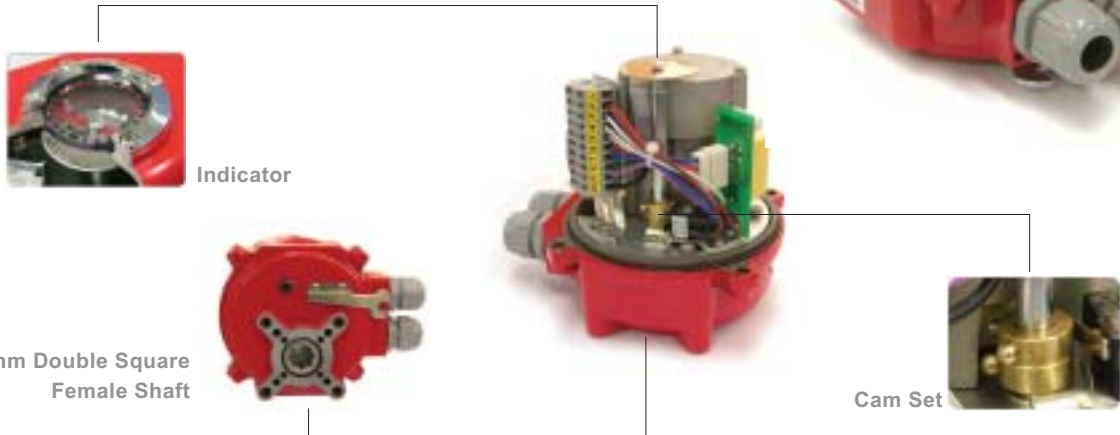
<b>Enclosure</b>	IP66, O-ring Sealed
<b>Main Power</b>	Free Voltage (110/220VAC/1Ph/50/60Hz) 24V AC/DC
<b>Duty cycle(on-off)</b>	S2 : 50%
<b>Motor</b>	DC motor
<b>Limit switches</b>	2 ea for Open & Close (5A, 250VAC)
<b>Extra Limit switches</b>	Relays for Open & Close (5A, 250VAC)
<b>Mounting</b>	ISO F03, 11 X 11 - DP12 Square female Shaft with insert 9X9mm
<b>Travel angle</b>	90°C ± 5°C
<b>Cable entry &amp; Wiring</b>	1-PG11 Cable gland with wires 30cm long
<b>Surface protection</b>	Polyester coating
<b>Ambient temperature</b>	-10°C ~ + 65°C
<b>Humidity(R.H)</b>	90%

## WIRING ITQ 0020 free voltage (110/220VAC)



# ITQ 0040

- Suitable for on-off small ball /plug valves and damper automation.
- By combination of spur gears, provide very high efficiency
- The motor is a specially designed induction motor that produces high starting torques and thermally protected from overheating.
- Manual operation by Spanner and dial position indication
- Compact and light weight.
- High duty cycle.



## PERFORMANCE

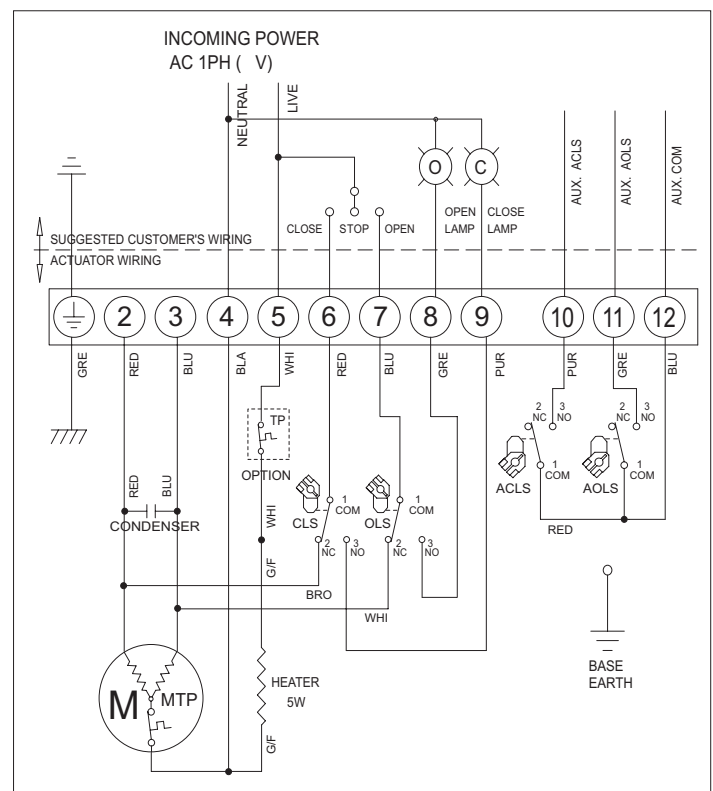
Model	Rate torque (Nm)	Duty cycle (%)	Operating time		Stem Adaption (Double square Female shaft)	Rated current					Motor insulation class	Weight (kgs)	No of handwheel turn
			50Hz	60Hz		1Phase		3Phase		DC			
						110	220	380	440	24V			
ITQ 0040	40	50	14	12	14X14mm	0.27	0.18	N/A	N/A	0.8	E	3	7.5

## STANDARD SPECIFICATION

<b>Enclosure</b>	IP66, O-ring Sealed
<b>Main Power</b>	110/220VAC/1Ph/50/60Hz, 24V DC
<b>Control power</b>	110/220VAC/1Ph/50/60Hz
<b>Duty cycle(on-off)</b>	S2 : 50%, max 30minutes
<b>Motor</b>	Induction motor
<b>Limit switches</b>	2 ea for each travel (No extra switch)
<b>Space heater</b>	2W
<b>Manual operation</b>	Extruded shaft on bottom
<b>Indicator</b>	Continuous Mechanical position indicator
<b>Mounting</b>	ISO F03/F05/07 flange with double square female shaft
<b>Travel angle</b>	90° ± 10°
<b>Cable entries</b>	2 - PG 13.5
<b>Terminal block</b>	Spring loaded push type
<b>Surface protection</b>	Anodized polyester coating
<b>Ambient temperature</b>	-20°C~+70°C
<b>Humidity(R.H)</b>	90%

## WIRING

ITQ 0040 110/220 ON/OFF



# ECONOMIC TYPE ITQ ELECTRIC ACTUATOR



## ITQ 0080

- Newly designed and developed for especially small ball & plug valves and damper automation.
- Self locking combination of spur and worm gears that require no brake
- The motor is a specially designed induction motor that produces high starting torques and thermally protected from overheating
- Mechanical Stopper bolts to prevent from over travel
- Easy set cams without special tool.
- Manual operation by wrench directly to the worm gearbox and dial position indication



## PERFORMANCE

Model	Rate torque (Nm)	Duty cycle (%)	Operating time		Adaption (Double square Female shaft)	Rated current					Motor insulation class	Weight (kgs)	No of handwheel turn
			50Hz	60Hz		1Phase		3Phase		DC			
					110	220	380	440	24V				
ITQ 0080	80	50	16	14	17X17mm	0.97	0.52	0.52	0.56	0.8	E	3.5	7

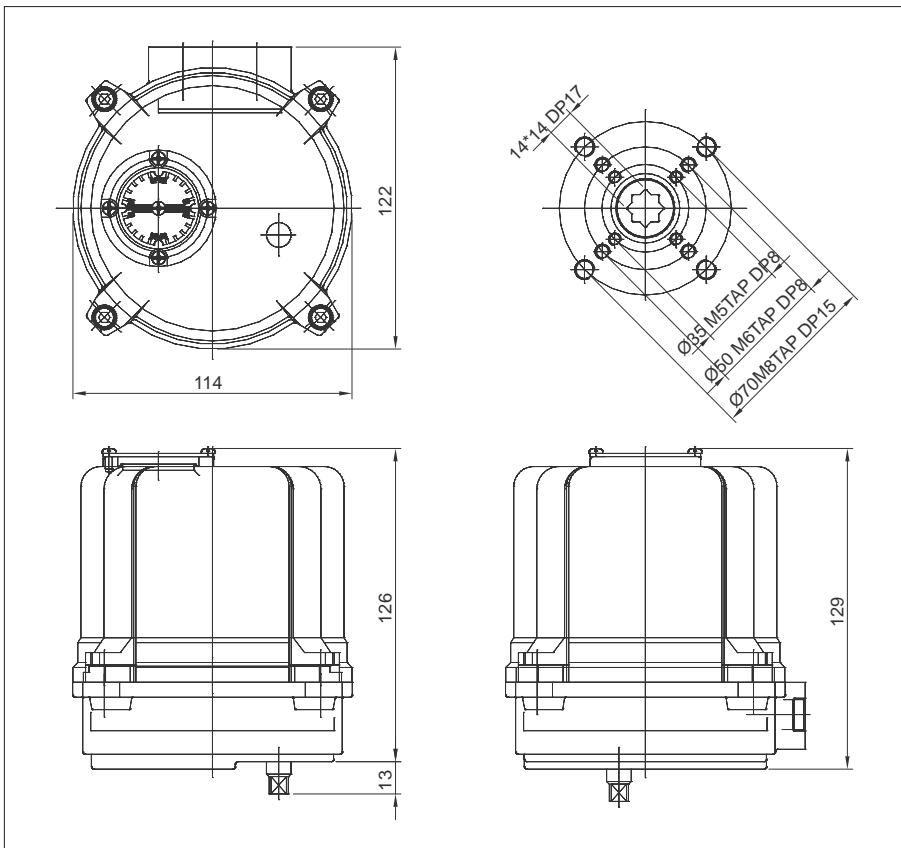
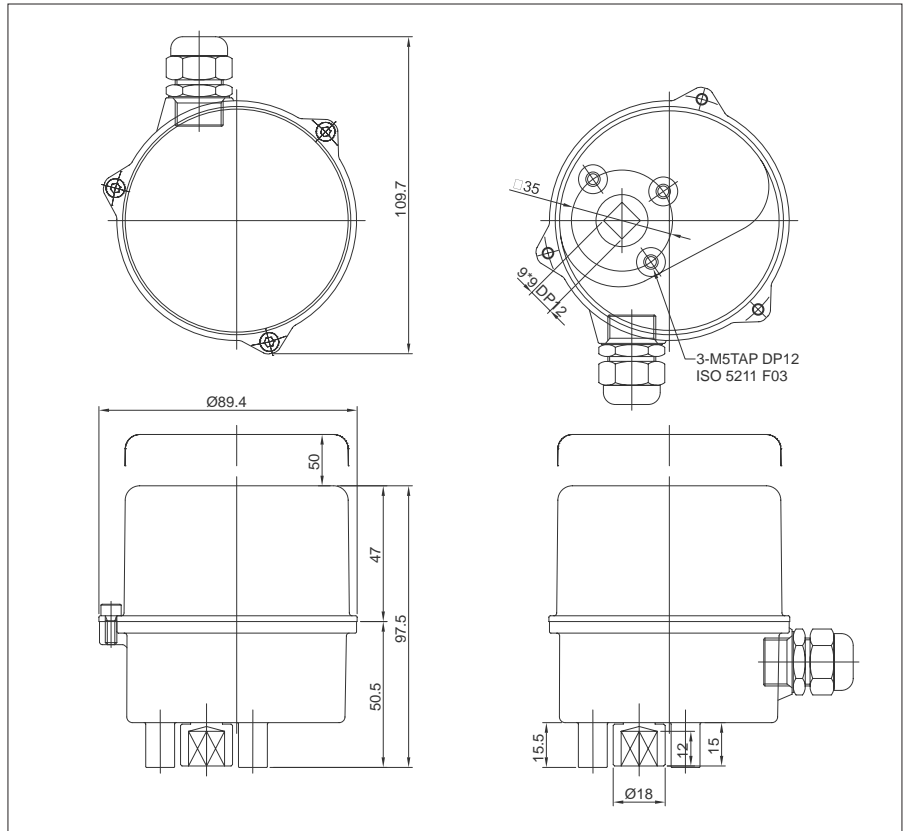
## STANDARD SPECIFICATION

<b>Enclosure</b>	Weatherproof IP67, O-ring sealed
<b>Main Power</b>	110/220VAC/1Ph/50/60Hz, 380/440VAC/3Ph/50/60/Hz, 24VDC
<b>Control power</b>	110/220VAC/1Ph/50/60Hz
<b>Duty cycle(on-off)</b>	S2 : 40%, Max 30 minutes
<b>Motor</b>	S4, 50%, 1200 start/Hour
<b>Duty cycle(modulating)</b>	Induction motor
<b>Limit switches</b>	2 ea for each travel end (1 each as dry contact)
<b>Space heater</b>	3W
<b>Manual operation</b>	By wrench (M6) directly to the worm gear
<b>Indicator</b>	Continuous Mechanical position indicator
<b>Mounting</b>	ISO F05 & F07 flange with double square female shaft
<b>Self locking</b>	By means of worm gearing
<b>Travel angle</b>	90° ± 10° by external adjustable mechanical stopper
<b>Cable entries</b>	2 - M20 X 1.5 (option : 2- PF1/2")
<b>Terminal block</b>	Spring loaded push type
<b>Surface protection</b>	Anodized & polyester coating
<b>Ambient temperature</b>	-20°C~+70°C
<b>Humidity(R.H)</b>	90%

## OPTION AVAILABLE (0080 Only)

PK	-Potentiometer kit (output signal : 0~1 Kohm)
	-High resolution potentiometer
CT	-Current transmitter (output signal : 4-20mA)
	-Zero / Span Adjustment
RPC	-Convertible DIP Switch (4 wire to 2 wire)
	-Remote position controller (by input and output signal)
	-Input : 4-20mA, 0-10VDC, 2~10VDC, 1~5VDC, 0~5VDC
	-Output : 4-20mA, 0-10VDC, 2~10VDC, 1~5VDC, 0~5VDC
	-Auto-calibration
	-Reverse operating direction

## ***DIMENSIONAL DRAWING***

**ITQ 0020**

**ITQ 0040**

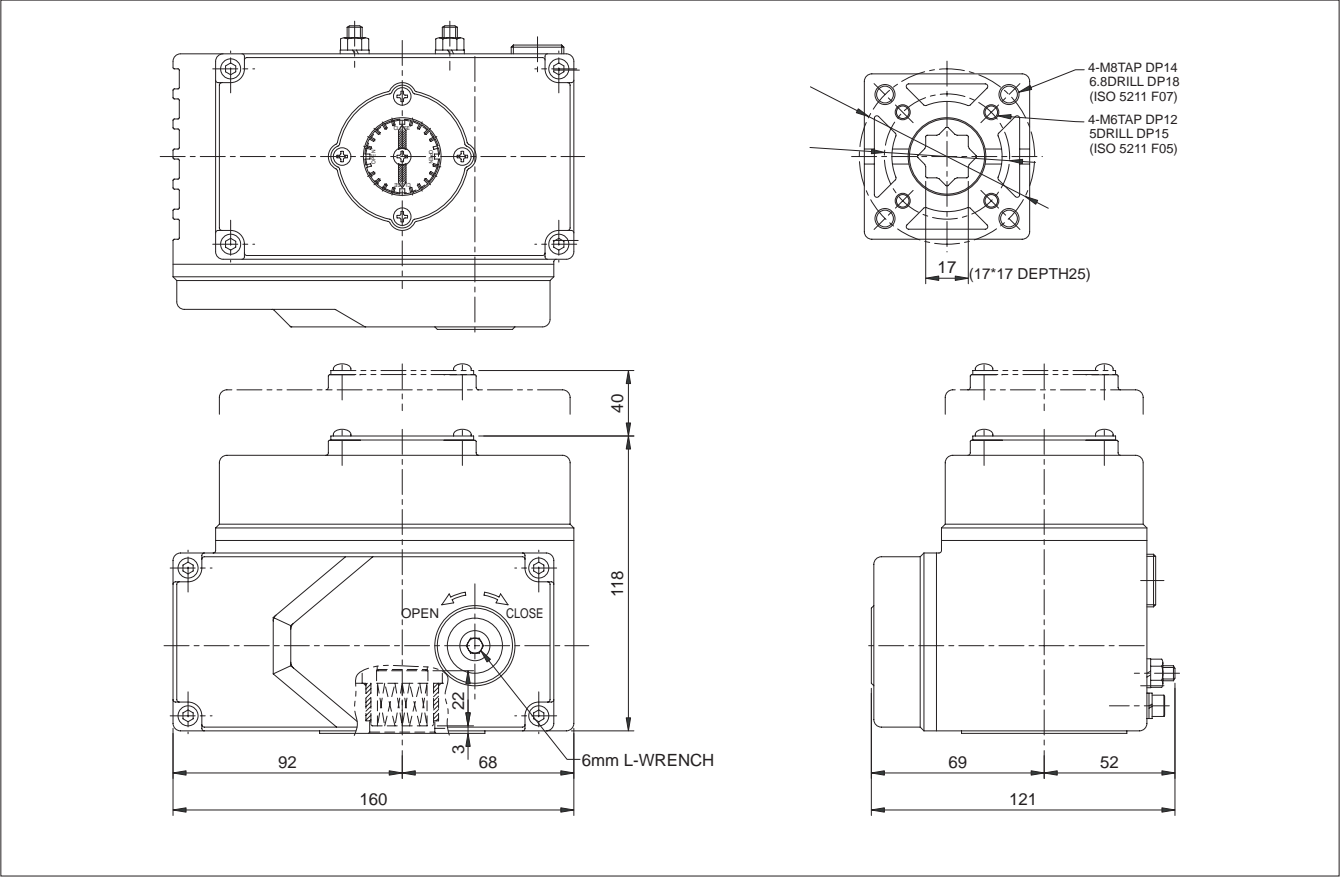




# ECONOMIC TYPE ITQ ELECTRIC ACTUATOR

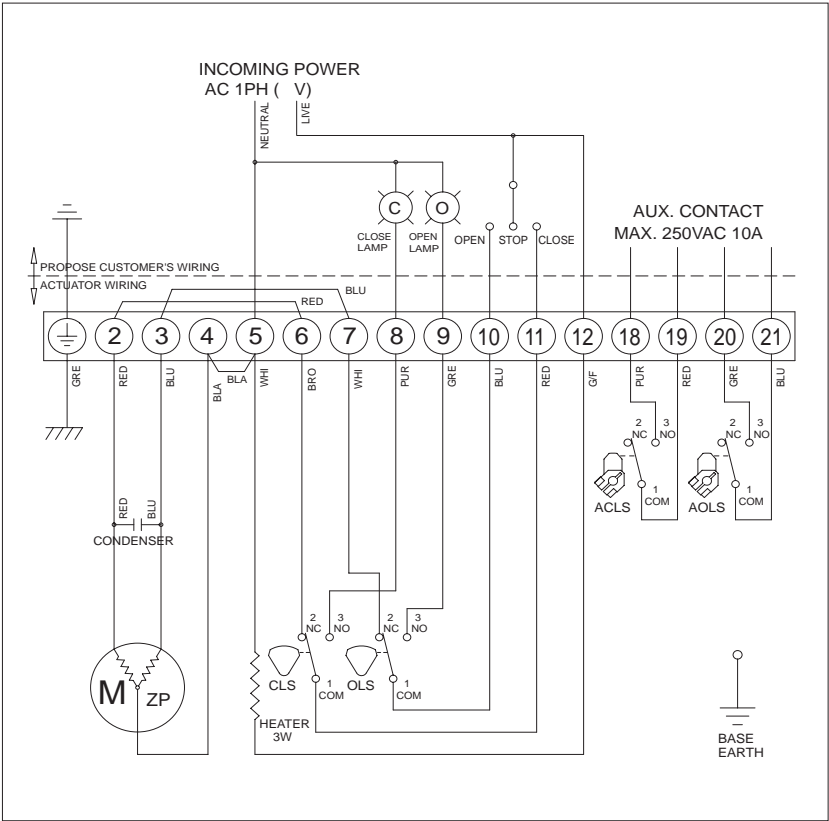
## DIMENSIONAL DRAWING

ITQ 0080



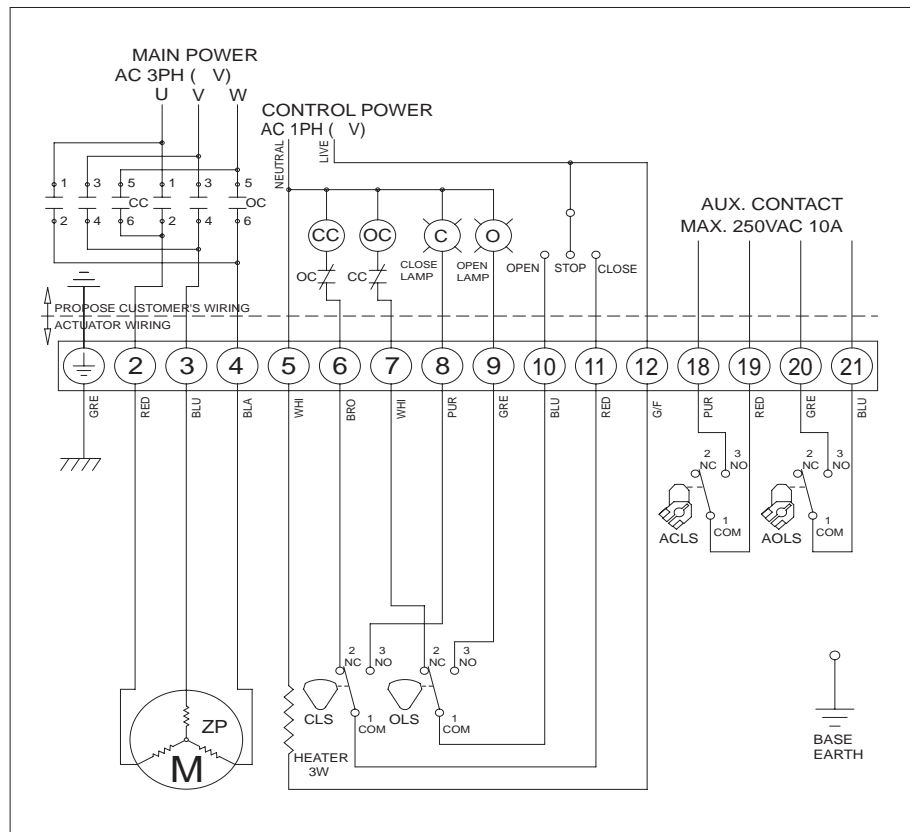
## WIRING

ITQ 0080 110/220 (On-Off)

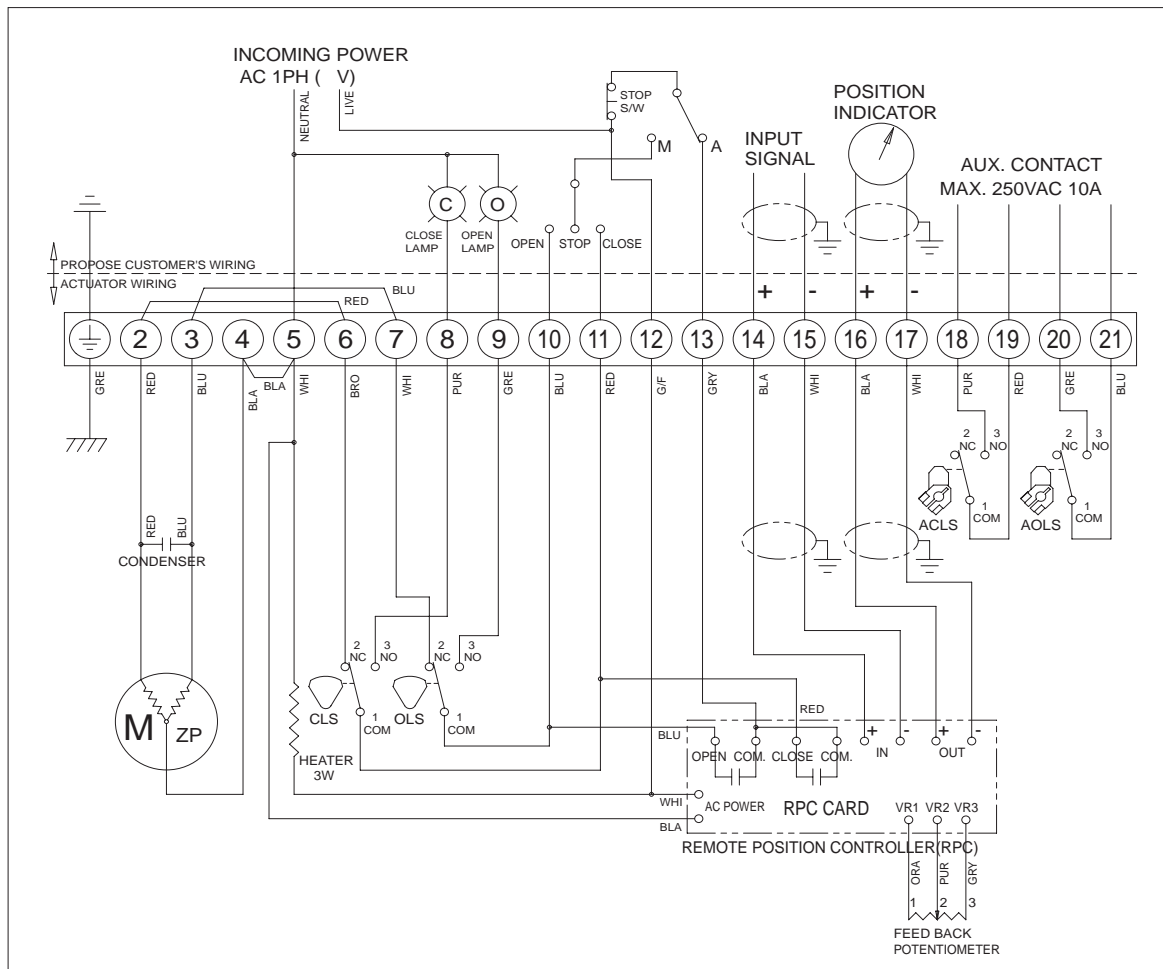


# WIRING

## ITQ 0080 380/440 ON/OFF



## ITQ 0080 110/220 RPC





The details of this catalog are subject to change without prior notification.

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